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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/963,332	09/24/2001	Jukka Seppala	324-010518-US (PAR)	1192
2512	7590	03/03/2006	EXAMINER	
PERMAN & GREEN 425 POST ROAD FAIRFIELD, CT 06824			LEVITAN, DMITRY	
			ART UNIT	PAPER NUMBER
			2662	

DATE MAILED: 03/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<p align="center"><b>Office Action Summary</b></p>	<b>Application No.</b> 09/963,332	<b>Applicant(s)</b> SEPPALA ET AL.	
	<b>Examiner</b> Dmitry Levitan	<b>Art Unit</b> 2616	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
  - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
  - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 06 February 2006.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1,2,5-7,9-17 and 19-29 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1,2,5-7,9-17 and 19-29 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
 Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
 Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |  |
|---|--|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)<br>2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)<br>3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____<br>5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)<br>6) <input type="checkbox"/> Other: _____ |
|---|--|

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Amendment, filed 02/06/06, has been entered. Claims 1, 2, 5-7, 9-17 and 19-29 remain pending.

***Claim Rejections - 35 USC § 112***

1. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

2. Claims 11-17, 19, 20, 23-29 rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 11, 13, 15 and 19 limitations “one or more other network elements” are unclear, because it is not understood what elements are considered “other”: the elements of the network except the element comprising an IP mobility agent or the elements belonging to other network.

***Claim Rejections - 35 USC § 103***

1. Claims 1, 2, 5-7, 9, 10, 21 and 22 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins (IP mobility support RFC 2002, October, 1996, pp. 1-56) in view of Feder (US 6,522,881).

2. Regarding claims 1, 5-7, 9, 10, 21 and 22, Perkins substantially teaches their limitations:

A method, network element, router and mobile node (outline of operation of Mobile IP protocol on page 8) using mobility agents in a telecommunication system (foreign agents and home agents on page 8), which comprises at least one mobile node supporting mobile IP (mobile node on Figure on page 11) and several network elements, of which at least one comprises one or more mobility agents configured to transmit advertising messages to mobile nodes (foreign agent

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as shown on Figure on page 11, transmitting advertising messages to mobile nodes on page 14, wherein foreign agent is operating as a router, because it implements standard IP routing mechanisms, page 10). Also Perkins teaches transmitting information on the attributes of one or more foreign agents from mobility agents to at least one mobile node (transmitting a mobility agent advertisement extension as shown on page 16, comprising field B, "Busy", indicating that the foreign agent will not accept registrations from additional mobile nodes, page 17).

Perkins does not teach several foreign agents, collecting by a mobility agent information on attributes of network elements in the system, and said information comprising the load of the foreign agent and using said information in the mobile node in the selection of the serving network element by comparing the attributes of different foreign agents.

Feder teaches several serving elements (multiple access points as shown on Fig. 2 and 2:4-15), collecting information on attributes of network elements in the system (inherently part of Feder teachings, because access points/APs, as shown on Fig. 2, are the network elements, and the information about the elements/AP load should be collected for its transmission 2:16-33), transmitting attributes of different serving elements comprising their load and using said information in the selection of the serving element by a mobile node (selecting access points based on their load and performance 2:16-33) by comparing attributes of different foreign agents in the mobile wireless node on the basis of the information/load received from the foreign agents (comparing the access nodes load information, transmitted by access points beacons 6:9-12), Selecting the best foreign agent based on the load of the foreign agents (selecting the best access point, based on the access points received load levels 6:62-7:5 and radio channel measurements 6:40-50) and establishing connection between the mobile node and the selected access

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point/foreign agent/router (inherently part of the system, because registering with the best of access points is essential for the system operation).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to use several foreign agents of Perkins, collect and include their load information into the elements advertising messages for selecting one of them by a mobile node by comparing their attributes of Feder to the system of Perkins to improve the system operation in the condition of the foreign agent overload, when it is consistently busy, by adding more serving elements with foreign agents increasing the system capacity and providing information for the mobile nodes to select appropriate foreign agent.

3. Regarding claim 2, Perkins teaches transmitting advertising messages including care-of address (acquisition of care-of address on page 9) periodically (sending advertisements periodically on page 16) and at the request of a mobile node (mobile node agent solicitation procedure on page 21).

4. Regarding claim 28, Perkins teaches a registration request transmitted to the selected foreign agent (Section 3.1 Registration Overview, including Registration Request messages).

5. Claims 11-17, 19, 20, 23 and 24 are rejected under 35 U.S.C. 103(a) as being unpatentable over Perkins in view of Feder in view of Soliman (XP-002249000, 13 September 2000).

6. Regarding claims 11-17, 19, 20 and 23-26, Perkins in view of Feder substantially teaches their limitations (see rejection of claims 1 and 5-7 above).

Perkins in view of Feder does not teach transmit and receive advertising messages comprising attributes of the other elements of the network, means for transmitting advertising

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messages, means for collecting information, means for transmitting the information, reception means and processing means.

Soliman teaches transmit and receive advertising messages comprising attributes of the other elements of the network (adding an option to the router advertisements comprising the “distance “ field with number of hops of the MAP domain/network, therefore transmitting and receiving attributes/routing information of the other nodes of the network, as shown on Fig. 1 and page 8).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to add transmitting and receiving advertising messages comprising attributes of the other elements of the network of Soliman and means for transmitting advertising messages, means for collecting information, means for transmitting the information, reception means and processing means to the method of Perkins in view of Feder to improve the system selection of available access points, minimizing the routing distance and implement the method into an operational system, because claimed means implement directly the appropriate method steps.

In addition, regarding claims 27 and 29, Soliman teaches advertising messages comprising current delay of the connection offered by the foreign agent (“distance” filed of the advertising message, wherein the number of hops measure the current delay of the connection, as the delay can be measured by number of hops).

### ***Response to Arguments***

7. Applicant's arguments filed 02/06/06 have been fully considered but they are not persuasive.

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On page 12 of the Response, Applicant argues that there is no motivation to combine teachings of Perkins and Feder.

Examiner respectfully disagrees.

In response to applicant's argument that there is no suggestion to combine the references, the examiner recognizes that obviousness can only be established by combining or modifying the teachings of the prior art to produce the claimed invention where there is some teaching, suggestion, or motivation to do so found either in the references themselves or in the knowledge generally available to one of ordinary skill in the art. See *In re Fine*, 837 F.2d 1071, 5 USPQ2d 1596 (Fed. Cir. 1988) And *In re Jones*, 958 F.2d 347, 21 USPQ2d 1941 (Fed. Cir. 1992).

In this case, Perkins teaches a system for establishing an Internet connection with mobile nodes, regardless of their current point attachment to the Internet (Abstract) and Feder teaches selecting an Access Point for establishing a connection between a mobile unit and Internet (Fig. 1 and 1:32-46). Perkins indicated a situation when a foreign agent is busy and does not accept registration from the mobile unit to the Internet (page 17).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize several foreign agents of Perkins and the method of Feder by selecting the most appropriate foreign agent.

In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on

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combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

Therefore, Examiner respectfully disagrees with Applicant's arguments regarding Perkins and Feder teachings on pages 13 and 14. Examiner would refer to the rejection of the claims wherein the claims are matched with appropriate portions of Perkins and Feder the teachings.

On page 14 of the Response, Applicant argues that Perkins and Feder do not teach using the attribute information on other network elements.

Applicant's arguments with respect to the attribute information on other network elements have been considered but are moot in view of the new ground(s) of rejection, comprising Soliman teachings (see rejection above).

### ***Conclusion***

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Dmitry Levitan whose telephone number is (571) 272-3093. The examiner can normally be reached on 8:30 to 4:30.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Chi Pham can be reached on (571) 272-3179. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.



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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

A handwritten signature in black ink, appearing to read 'DL' followed by a stylized name.

Dmitry Levitan  
Patent Examiner.  
02/28/06